

RemoteView (Windows) JPEG 2000

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Integration Overview

- RemoteView – JPEG 2000 integration consists of four separate phases. These phases are: decompression, compression, metadata items, and optimization.
- RemoteView uses the Kakadu library API to interface with the JPEG 2000 codestream.
- Recent RemoteView-JPEG 2000 work has focused on the JPEG 2000 decompression phase.

Decompression Integration Phase

- NITF embedded JPEG 2000 codestream “R0” base image (tiled and untiled) decompression is complete.
- Stand-alone (non-NITF embedded JPEG 2000 image decompression is forthcoming and is anticipated for RemoteView version 2.4 release.
- Reduced resolution decompression directly from JPEG 2000 codestream is also forthcoming and is anticipated for RemoteView version 2.4 release.

Compression Integration Phase

- Basic NITF JPEG 2000 re-encode and conversion from various file formats anticipated for RemoteView version 2.4 release.
- Various compression settings can be user specified. Settings include number of quality layers, compression kernel (lossy or lossless), tile dimensions.

Metadata Items Integration

- As new NITF metadata items specific to JPEG 2000 are introduced and become standardized, the compression/decompression modules must recognize and handle these new directives.
- Test data sets including new metadata will drive this development.

Optimization Integration Phase

- Internal metrics applied throughout development process will continue to focus ongoing optimization efforts.
- Additional test data sets will also drive these optimization efforts. Large file datasets, various progression levels, and new metadata items are sought.

Kakadu CODEC Library

Advantages

- Large file support.
- Conforms to the JPEG 2000 “Profile 2” specification.
- Object oriented API.
- Source code availability.